

For Research Use Only

GATA3 Recombinant antibody, PBS Only (Capture)

Catalog Number: 83808-1-PBS



Basic Information

Catalog Number: 83808-1-PBS	GenBank Accession Number: BC003070	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 2625	CloneNo.: 240684A2
Source: Rabbit	UNIPROT ID: P23771	
Isotype: IgG	Full Name: GATA binding protein 3	
Immunogen Catalog Number: AG0174	Calculated MW: 443 aa, 48 kDa	
	Observed MW: 37 kDa and 48 kDa	

Applications

Tested Applications:
WB, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse

Product Information

83808-1-PBS targets GATA3 as part of a matched antibody pair.

MP01933-1: 83808-1-PBS capture and 83808-4-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

Trans-acting T-cell-specific transcription factor, also known as GATA3, belongs to the zinc-finger transcription factor GATA family which drives the differentiation of T helper (Th) 2 cells. GATA factors are expressed in a tissue-specific manner and GATA3 is present in both hematopoietic (e.g., T cells) and non-hematopoietic tissues, including the kidney, central nervous system, skin, and mammary gland (PMID: 25148023). GATA3 plays a central role in Th2 responses both in vitro and in vivo (PMID: 16467870). The full-length GATA3 protein contains 444 aa corresponding to the molecular weights of 48 kDa, and the truncated protein was detected at approximately 37 kDa (PMID: 24758297).

Storage

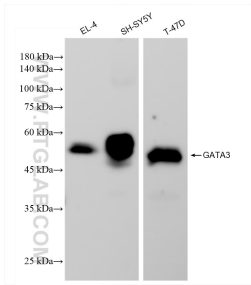
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

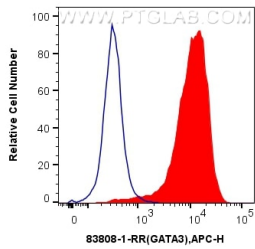
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

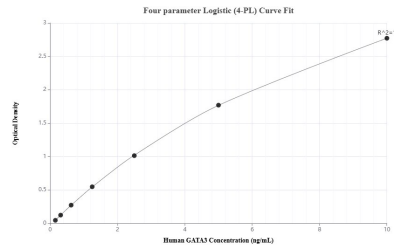
Selected Validation Data



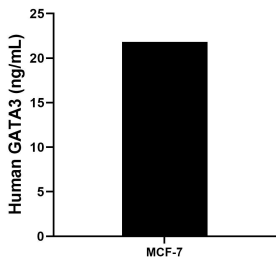
Various lysates were subjected to SDS PAGE followed by western blot with 83808-1-RR (GATA3 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83808-1-PBS in a different storage buffer formulation.



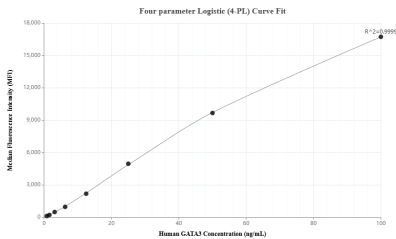
1×10^6 Jurkat cells were intracellularly stained with 0.25 ug GATA3 Recombinant antibody (83808-1-RR, Clone:240684A2) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83808-1-PBS in a different storage buffer formulation.



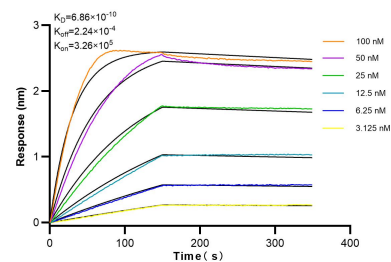
Sandwich ELISA standard curve of MP01933-1, Human GATA3 Recombinant Matched Antibody Pair - PBS only. 83808-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag0174. 83808-4-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ng/mL



The mean GATA3 concentration was determined to be 21.82 ng/mL in MCF-7 cell extract based on a 1.3 mg/mL extract load.



Cytometric bead array standard curve of MP01933-1, GATA3 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83808-1-PBS. Detection antibody: 83808-4-PBS. Standard: Ag0174. Range: 0.781-100 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83808-1-RR against Human GATA3 were performed. The affinity constant is 0.686 nM.